REMARKS/ARGUMENTS

Claims 2-39 have been newly added. Claims 1-39 are now pending in the application. In addition, the specification and the Abstract have been amended. Applicants respectfully request reexamination and reconsideration of the application.

The Title has been objected to. Applicants respectfully traverse the objection to the Title and assert that the current Title—"Process And Apparatus For Adjusting Traces"—is descriptive of the invention. Applicants note that new claims 2-39 are not limited to an electronic system but, consistent with paragraph [0082] on page 22 of the specification, are broadly applicable to any system or representation of any system in which one or more traces interconnect elements of the system. Paragraphs [0001], [0007], [0019], and [0049] have been amended to be consistent with paragraph [0082], which states that the invention is not limited to use with an electronics system or a representation of an electronics system. Therefore, Applicants request that the objection to the Title be withdrawn.

The Specification has been objected to on the grounds that the Abstract and the Summary are allegedly identical. Applicants have amended both the Abstract and the Summary and believe that the objection has been overcome.

The Specification has been further objected to because the serial number of a patent application mentioned in paragraphs [0022] and [0049] was not included. Applicants have amended those paragraphs to add the serial number of the patent application and believe that the objection has been overcome.

Claim 1 was rejected under 35 USC § 102(b) as anticipated by U.S. Patent No. 6,077,311 to Lichtenstein et al. ("Lichtenstein"). Applicants respectfully traverse this rejection.

Claim 1 is directed to a process for adjusting traces. The traces are adjusting by assigning forces to nodes that define the traces and then moving the traces in accordance with the forces. Lichtenstein, in stark contrast, is directed to debugging software. In Lichtenstein, a portion of a large piece of software is extracted and tested. In Lichtenstein, a "trace" is a recorded history of the lines of software executed during a test run and the values of variable set during the test run. Thus, Lichtenstein's disclosure is not even remotely related to claim 1 of the instant application and fails to disclose any part of claim 1. For example, Lichtenstein does not assign forces to nodes of a trace, nor does Lichtenstein move nodes in accordance with such forces. Therefore, the rejection of claim 1 should be withdrawn.

New claims 2-39 include two independent claims: claims 2 and 32.

Independent claim 2 is directed to a "method for adjusting a trace defined by sequential nodes." The trace defines "a path between first and second end points within [a] routing space." Forces are assigned "to ones of the nodes," and nodes are then moved within the routing space in accordance with the forces. Several nonlimiting examples are shown throughout the specification. For example, Figures 3A-3F illustrate an example in which forces 320, 322, 324, 326, and 328 are assigned to nodes 308, 310, 312, 314, 316, and 318 of trace 302. (See Figure 3D.). Nodes 310, 312, 314, and 316 are then moved in accordance with the individual forces assigned to each of those nodes. (See Figure 3F.) Figures 4A-4C illustrate another nonlimiting example in which forces are assigned to nodes 412, 414, and 416 of trace 402 (see Figure 4B) and those nodes are then moved in accordance with the forces (see Figure 4C). Other examples are shown in the specification.

As discussed above, Lichtenstein is directed to debugging software and is simply inapplicable to claim 2 of the instant application. Indeed, Lichtenstein discloses none of the elements of claim 2. For example, Lichtenstein does not assign forces to nodes of a trace, nor does Lichtenstein move nodes in accordance with such forces. Therefore, independent claim 2 and its dependent claims (claims 3-31) patentably distinguish over Lichtenstein.
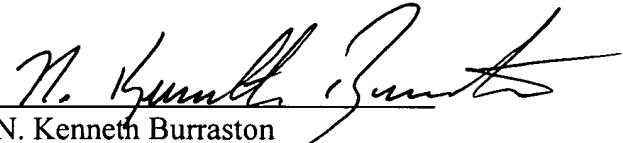
Independent claim 32 is directed to a "method of uncrossing a first trace and a second trace." Again, Lichtenstein's teachings regarding debugging software are simply inapplicable to claim 32 of the instant application, and Lichtenstein discloses none of the elements of claim 32. Therefore, independent claim 32 and its dependent claims (claims 32-39) patentably distinguish over Lichtenstein.

In view of the foregoing, Applicants submit that all of the claims are allowable and the application is in condition for allowance. If the Examiner believes that a discussion with Applicants' attorney would be helpful, the Examiner is invited to contact the undersigned at (801) 323-5934.

Respectfully submitted,

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By _____
N. Kenneth Burraston
Reg. No. 39,923

Kirton & McConkie
1800 Eagle Gate Tower
60 East South Temple
P.O. Box 45120
Salt Lake City, Utah 84111-1004
Telephone: (801) 323-5934
Fax: (801) 321-4893